

## 20-21 District Wide High School Science Priority Level 3 Learning Targets-Physics

In response to the COVID-19 pandemic and changes to educational contexts, the following level 3 learning targets from the 20-21 Physics curriculum guide will need to become the primary priority for all sections of this course. **This is subject to change as new information becomes available.** Current as of 8/27/2020.

The below topics and learning targets are deemed of critical importance and should be the primary focus of teachers enhancements to the district provided virtual course, paced to be the majority of learner time and engagement, fully supported with descriptive learning centered feedback on formative and summative assessments, encouraging multiple opportunities to revise and demonstrate proficiency.

All other learning targets are to remain incorporated as provided in the district ready virtual course, but necessarily emphasized in the facilitation. **Prioritization should not be interpreted to mean elimination of secondary/non-prioritized topics or learning targets.** There may be circumstances in exception to this. Any topics and/or targets to be eliminated will clearly identified below as instructing to them in the COVID-19 context is an unacceptable risk and the topic/target is not required by the Iowa Core.\*

Emphasizing a priority target could include, but not limited to:

- **Adding** lessons, activities, engagements to the provided district ready virtual course modules
- Providing extended target/success criteria centered individualized or whole group feedback following assessments
- Communicating encouragement to revise or offer multiple opportunities to accomplish deeper learning toward the priority targets
- Composing and posting instructional themed and appropriately timed course announcements proactively or responsively toward improving growth to a priority target
- Planning agendas for live/synchronous meetings with mini lessons or discussion toward priority targets.
- Providing pace planning documents/ pages, checklist to be sure learners seek to accomplish a deep level of learning in the priority target.
- **Evaluating the Body of Evidence for grading/topic scores which recognizes the priority targets having been an emphasis during facilitation. Once adequate evidence is collected for the prioritized target(s) which is credible and defensible a topic score can be determined.**

### Semester 1 SCI205

#### Topic 1: Describing Motion

Priority- A. Develop a model to describe and predict the motion of an object traveling at a constant velocity.

B. Develop a model to describe and predict the motion of an object traveling at a constant acceleration.

*Resource: ICC [HS-PS2-1](#) Evidence statement to guide learner feedback and course customization.*

#### Topic 2: Forces

Priority- A. Analyze data to develop a relationship between acceleration, mass and force.

B. Analyze a system to determine net force and acceleration of an object in one dimension.

Resource: ICC [HS-PS2-1](#) Evidence statement to guide learner feedback and course customization.

### Topic 3: Momentum

Priority- B. Draw conclusions about the force, time, and change in momentum in a given scenario using the momentum impulse theorem.

Resource: ICC [HS-PS2-2](#) Evidence statements to guide learner feedback and course customization.

## Semester 2 SCI206

### Topic 1 Energy

3B. Use a mathematical model to predict changes in a system based on conservation of energy. [HS PS3-1](#)

- Predict changes in a system when energy is not transferred in or out of the system.
- Predict changes in a system where energy is transferred in and out of the system

### Topic 2 Electricity and Magnetism

3D. Use mathematical representation of Coulomb's Law to describe and predict electrostatic forces between objects. [HS-PS2-4](#)

- The emphasis is on the conceptual aspects of an inverse square relationship.

### Topic 3 Waves

3A. Use mathematical representations to support a claim regarding relationships among the frequency, wavelength and speed of waves traveling in various media. [HS-PS4-1](#)